Conservation Crop Rotation

Conservation Practice Job Sheet - 328

Conservation Crop Rotation

is growing different crops on the same piece of land in a recurring sequence.

This sequence may include alternating from a high residue crop, such as grain corn or small grain, to a low residue crop such as vegetables or soybeans. Hay is common in many rotations.

How Conservation Crop Rotation Helps

The effect crop rotations have on the land varies depending upon the capability of the land, the type of crops used in the rotation, how the crops are grown, and how the crop residue is managed.

Hay is often the most effective crop in conserving the soil. Rotations that include hay may produce higher yields, increase profit, return more organic matter to the soil, improve soil tilth, and control soil erosion.

In addition to soil erosion control, rotations break many insect, disease, and weed cycles and are often recommended specifically for these purposes.

Rotations often remove the host or other environmental factors that cause pest problems. The use of rotations can reduce the need for pesticides.

A rotation can be a low cost practice. Rotations can reduce total input costs, sustain the soil, and provide better growing conditions for future crops.

Using Conservation Crop Rotation

Soil conserving crop rotations can be used where soil erosion is a problem. Rotations work best with other conservation practices such as residue management, contouring, stripcropping, diversions, terraces, and waterways.

Rotations can be used to help reduce soil loss. Maximize the use of high residue crops in rotations to optimize soil conservation, soil organic matter, soil tilth, and minimize the years of row crops.

Requirements of Conservation Crop Rotation

In order to reach the planned level of erosion reduction, you must follow the crop rotation shown in your conservation plan.

Applying the Practice

This practice is considered applied when the most conserving crop has been planted at least once in each specified field. The "most conserving" crop is the crop with the lowest overall erosion potential in the specified crop rotation.

Maintaining the Practice

After the rotation is established, it will continue and be repeated on the established schedule.

Other Considerations

In general, crops can be categorized into high and low residue producing groups.

The high residue producing crops are considered more conserving because they provide better protection to the land than the low residue producing crops. Knowing which kind of crop you are growing can be useful in planning any crop substitutions.

Common Virginia crops are listed below by category.

High residue crops

- Corn
- Sorghum (grain)
- Small grain
- Forages (grass or legume)
- All crops with winter cover crop

Low residue crops

- Corn (silage)
- Sorghum (silage)
- Soybeans
- Vegetables
- Cotton
- Peanuts
- Tobacco

Adjusting the Rotation

Weather conditions, unexpected herbicide carryover, and marketing considerations may require a change in your scheduled rotation. Simple adjustments to rotations can often be made.

Any crop substitution that is outside of those identified in these instructions should be approved by NRCS prior to planting the crop.

Where To Get Help

Your local Natural Resources Conservation Service personnel can assist in selection of a conservation crop rotation that will help control soil erosion and fit into your farming system.

Alternative

This table may be used to help schedule your crop rotations. Fill in the blanks with the appropriate crop for that year. The most soil-conserving crop is circled.

Landowner_____

Farm #_____Tract #_____

SAMPLE

Field #	**__1___**	**__2___**	_____	_____	_____
Rotation begins (year)	**2001**	**2003**	_____	_____	_____
Year 1 (crop)	**corn**	**corn/cover crop**	_____	_____	_____
Year 2	**small grain/sorghum***	**corn/cover crop**	_____	_____	_____
Year 3	**_____**	**alfalfa***	_____	_____	_____

***indicates rotation applied**

Field #	_____	_____	_____	_____	_____
Rotation begins (year)	_____	_____	_____	_____	_____
Year 1 (crop)	_____	_____	_____	_____	_____
Year 2	_____	_____	_____	_____	_____
Year 3	_____	_____	_____	_____	_____
Year 4	_____	_____	_____	_____	_____
Year 5	_____	_____	_____	_____	_____
Year 6	_____	_____	_____	_____	_____
Year 7	_____	_____	_____	_____	_____
Year 8	_____	_____	_____	_____	_____

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD.)

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC, 20250-9410 or call (202) 720-5964 (voice and TDD.) USDA is an equal opportunity provider and employer.

January 2001